



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460**

**OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES**

Memorandum

From: Nikiba Daughtry, Biologist/ 7/23/04
Environmental Field Branch
Field and External Affairs Division

To: Arthur-Jean Williams, Chief
Environmental Field Branch
Field and External Affairs Division

Subject: Effects Determination for Oxyfluorfen for Pacific Anadromous Salmonids

We reviewed data and other information for Oxyfluorfen, a pre-emergent and post-emergent broadleaf and grassy weed herbicide named by the Washington Toxics Coalition (WTC) and included in the court order for 'effects determinations' and potential consultation with the National Marine Fisheries Service. Oxyfluorfen is registered nationally for use on a variety of field, fruit, and vegetable crops, ornamentals as well as non-crop sites. The Environmental Fate and Effects Division (EFED) has completed an environmental risk assessment for a Reregistration Eligibility Decision (RED) issued in December of 2000. The assessment concludes that levels of concern are exceeded for endangered freshwater fish and populations of aquatic invertebrates exposed to runoff and drift from agricultural treatment sites. We have adapted the more general findings of the EFED assessment to develop an analysis of the potential for effects on endangered and threatened Pacific salmon and steelhead Evolutionary Significant Units (ESUs) from current uses in California and the Pacific Northwest.

Based on the environmental risk assessment and additional considerations indicated in our analysis and other attached or referenced materials, we conclude that the use of oxyfluorfen will have no effect on 26 ESUs. Our determinations are based on the known or potential use of Oxyfluorfen on crops within habitats and migration corridors of each ESU, the acute risk of Oxyfluorfen to endangered fish, and the potential for indirect effects due to acute and chronic risks to their aquatic-invertebrate food supply. We don't have county-level usage data for

homeowner and most noncrop uses, but we presume that they may contribute to the exposure and risks of these ESUs.

attachments

Oxyfluorfen: Analysis of Risks to Endangered and Threatened Salmon and Steelhead